How to Benchmark a Campus in Portfolio Manager®

EPA's ENERGY STAR Portfolio Manager tool helps you measure and track the energy and water use, waste and materials, and greenhouse gas emissions of your buildings, all in a secure online environment. You can use the tool to identify under-performing buildings, set investment priorities, verify efficiency improvements, and receive EPA recognition for superior energy performance.

Within Portfolio Manager, you can benchmark single building properties, as well multi-building properties (more commonly referred to as campuses). Benchmarking a campus allows you to measure the performance of single-building properties, while also tracking how these properties contribute to campus-wide performance. For the purposes of this document, the campus-building level relationship is described using the following terms:

> **Steps to Benchmark a Campus**
>
> 1. Create "Parent" Property
> 2. Add "Child" Properties
> 3. Add Meters
> 4. Confirm meter configurations
> 5. Review campus

> **Campus-level terms**: Campus // Parent property // Multi-building property
>
> **Building-level terms**: Building // Child property // Single-building property

Please note that if you plan to apply for ENERGY STAR Certification for your campus, some additional guidelines must be followed. In order to be eligible for ENERGY STAR Certification, a campus of buildings must be a single, cohesive property with a single shared primary function. Only five property types are eligible to apply for certification as a campus (and, in fact, if these property types consist of multiple buildings, they must certify as a campus – individual buildings cannot be cherry-picked for certification while others are excluded):

- Hospital
- Hotel
- K-12 School
- Multifamily Housing
- Senior Care Community

For other property types that exist as a campus (such as an office park made up of multiple office buildings, or a lot containing several warehouses), each individual building must be benchmarked and certified individually. This may require sub-metering if multiple buildings share an energy meter.

For purposes of ENERGY STAR Certification, the following are examples of properties that would not qualify as a campus:

- Two or more office buildings that share a central plant and are not sub-metered. Regardless of metering configuration, Offices are not eligible to apply for certification as a campus.

- A K-12 School that sits on the same property as the School District Office. Even if they share a plot of land and are owned by the same organization, the District Office serves a distinct and separate function from the K-12 School. Unless the Office building contains classrooms used by the school, these buildings would need to benchmark and certify separately.

For properties eligible to certify as a campus, a good guideline for determining whether a set of buildings is truly a campus is to ask whether the property's operations would be substantially affected if one of the buildings were to be relocated. In the second example above, neither the K-12 School nor the District Office would be affected if the Office were to move to another location 5 miles away, so they do not constitute a true campus (unless, as noted above, the District Office building contained classrooms used by the school). For a Hotel consisting of multiple buildings, however, it would substantially affect the operations if a building containing guest rooms were to move 5 miles away from the building containing the restaurant, concierge, etc., so those buildings would be considered part of a cohesive campus.

Follow the steps in this document to benchmark your campus, and refer to **Appendix A** for detailed answers to Frequently Asked Questions about campus benchmarking.

1 Create a Parent Property

The first step in creating a campus is to create the "parent" property and identify the number of "child" properties associated with it. This process follows the same steps you would follow if you were benchmarking a single-building property.

1. Click **Add a Property** on the **My**Portfolio** tab. This added property will be referred to in this document as the parent property, and should represent the total number of buildings on your campus.
    Note: For more information on how to add a new property, see the Portfolio Manager Quick Start Guide.

2. Enter general information for the parent property on the **Set up a Property** page. In the **Your Property's Buildings** section be sure to select **More than One** and specify the number of buildings. Note that you are not required to benchmark any of these single buildings separately from the campus.
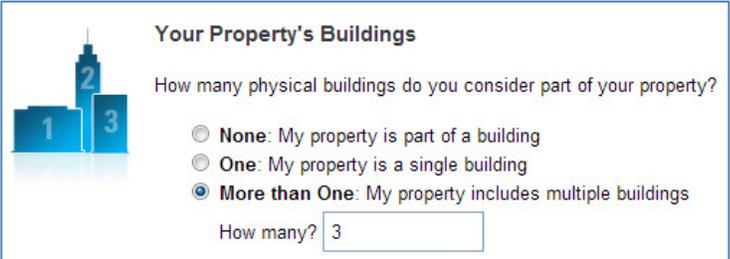
    Your Property's Buildings

    How many physical buildings do you consider part of your property?

    ○ **None**: My property is part of a building
    ○ **One**: My property is a single building
    ● **More than One**: My property includes multiple buildings
    How many? 3

3. On the **Basic Property Information** page, enter information about the parent property as a whole. Aggregate the gross floor area and occupancy percentage values to account for the totals across all buildings on the campus.

4. On the **How is it used?** page, enter the required use details to describe the parent property. As always, EPA recommends that you select as few use types as possible by choosing the property use(s) that describe the overall function of the campus. For example, for a college parent property you can enter just one property use: "college/university," you do not need to add separate property uses for office, dormitory, library, etc, even if you will add separate buildings for them.

2 Add a Child to the Parent Property

You can include as many single-building properties on your campus as you want. To add a child property to the parent property, click **Add a Building** on the **Summary** tab of the parent property. Then, you will have two options:

Option 1: Add an existing building

1. If the building you wish to add is already in Portfolio Manager, in the **Add a Building already in Portfolio Manager to the property** section, search for the existing building by name, location, or Portfolio Manager ID. Select the buildings to associate with the property and click **Add to Property**.

Option 2: Enter a new building

1. If the building you wish to add is not yet in Portfolio Manager, in the **Enter a New Building** section, add a new building by entering a name, primary function, and gross floor area, and then click **Continue**.

2. Enter basic property information and use details. Be sure to enter information for ONLY that building.

Child properties will appear on their own in your list of **MyProperties**, and will also show as children on the **Summary** tab of the Parent Property. You can edit and view information for each child property from either place.

Note: Property use information from child properties does not automatically roll up to the campus level. If you make changes to a child property's use details, you should update the parent property to reflect these changes. More information about this is provided in **Appendix A.**

3 Add Meters

After you create the parent and child properties, you can add meters that track building-level and campus-level energy and water performance as well as waste management. Meters that serve the entire campus, or multiple single-building properties on the campus, must be added at the parent property level. Meters that track the energy, water, or waste for all or part of a single-building property must be added at the child property level. Portfolio Manager cannot calculate performance metrics for single-building properties within a campus that do not have their own meters.

Keep the following points in mind when you add meter data:

✓ Meter data can be entered at the parent or child property level of the campus.
✓ Add meter data at the child property level only if a building has its own meter.
✓ Enter data at the parent property level when child properties share meters, or a master campus meter is present.
✓ A meter cannot be assigned to multiple child properties.

To create a meter, go to the **Energy, Water,** or **Waste & Materials** tab at the parent or child property level, click **Add A Meter**, and follow these steps.

1. If you create an energy or water meter:

   i. Select the type of energy or water used and the number of meters to create, and click **Get Started!**

   ii. Click on a meter to enter units and first bill date. If this meter reflects a bulk fuel purchase for an energy meter, select the **Enter as Delivery?** checkbox.

   iii. Click the blue arrow next to each meter to expand the section on the **Your Meter Entries** page. Click **Add Another Entry** under the meter and enter data. Check **Estimation** if you are not including measured data for the entry. You may also choose to record cost here, too. Once you're finished adding entries, click **Continue**.

   iv. Select the boxes of the meters that total your property's energy or water use on the **Select Meters to Include in Metrics** page. Click **Apply Selections**.

2. If you create a waste meter:

   i. Select the waste you are tracking and indicate what you do with it. Click **Continue.**

   ii. Indicate how often the material is being collected (regularly or intermittently), the units used for tracking, and if prompted, the date you first started tracking. Click **Create Meter(s).**

   iii. Click the blue arrow next to each meter to expand the section on the **Your Meter Entries** page. Click **Add Another Entry** under the meter and enter data. Check **Estimation** if you are not including measured data for the entry. You may also choose to record cost and disposal destination here, too. Once you're finished adding entries, click **Continue**.

For more information about how to add meter data in Portfolio Manager, see How to Get Utility Data Into Portfolio Manager. For additional information about metering issues specific to campuses, see **Appendix A.**

4 Confirm Meter Configurations and Associations

After you enter energy, water, and waste meter data at the parent and child property levels, you must indicate the meter configuration for each child property, and for the campus as a whole. For campuses, you must indicate if and how a child property-level meter is associated with the campus in order to calculate accurate campus-level metrics.

1. Specify how each meter should be counted toward your property and individual building totals on the **Select Meters to Include in Metrics** page.

2. For the meter configuration of the parent property, you have the option to associate child meters upward to capture their consumption data at the property level.

If you have navigated away from this page, you can return to it via the **Energy** or **Water** tab for each property. Then click **You Are Tracking: Edit** located on the left.

Note that if meter consumption of a child property meter is also being captured by a master meter at the campus level, the child property meter data should not be included in the campus meter consumption totals, as this would double count consumption data.

Note also that you have a situation where you benchmark the total energy for the campus, but at the child property level, you are only capturing electricity. In this case it is important to correctly configure the meter relationships for the child property in the "meter configuration" dialogue box. After you designate which meters to add together, you have to indicate if the "total" represents the entire property's energy use, or if it is only a portion of total energy use.

5 Review Your Campus

Portfolio Manager provides a diagram to help you review the relationship of child properties to the parent property, as you set it up in Portfolio Manager. The diagram also shows the metering arrangements at the level of the child and parent properties. This allows you to see, at a glance, how child properties relate to the parent property, as well as how child property-level meters contribute to campus totals.

To view the diagram, click **View as a Diagram** on the property's **Summary**, **Details**, or **Meters** tab.

📣 *Learn More!*

To learn more about Portfolio Manager, visit www.energystar.gov/portfoliomanager.

To get answers to your questions, visit www.energystar.gov/buildingshelp.

Appendix A: Frequently Asked Questions about Campus Benchmarking in Portfolio Manager®

Below is a set of frequently asked questions about benchmarking a campus which fall into the following categories: campus and building-level associations, ENERGY STAR score, metering, reporting, and sharing. If you do not see the answer to your question here, please visit www.energystar.gov/buildingshelp.

1. Campus and Building-Level Associations

- **Can a single-building property be associated with more than one campus?**
  Yes. This is allowed because there are no "nested" campuses in Portfolio Manager; there are only parent and child properties. A college provides a good example of how you can associate a single-building property with more than one campus. In this example, you could benchmark a college's ten buildings together, but also benchmark the four dormitories at the college together. In this case, you would create two parent properties (college and dormitories), and would associate the dorms with both parent properties.

- **I understand that a single-building property can be associated with a parent property, or campus. Can a building be associated with another building?**
  No. There is no building-to-building relationship in Portfolio Manager. Buildings can only be associated with a parent property.

- **Why doesn't property use information at the child level automatically roll up to the campus level?** This information does not automatically roll up because use details at the campus level could be different than the use details for the child properties that make up the campus. For example, think of a college that includes an office, dormitory, and laboratory. In this case, it is not logical to combine the different use details for these different property use types. If you make changes to a child property's use details, you should update the parent property to reflect these changes, as well. EPA always recommends that you enter as few uses as possible. Therefore, we would recommend that an entire college campus be benchmarked with one college/university use rather than a myriad of sub-functions. When you follow our recommendations, it will often be the case that your campus is a different use type than child properties associated with that campus.

2. ENERGY STAR 1-100 Score

- **What types of campuses can receive an ENERGY STAR score?**
  The only multi-building properties eligible to receive an ENERGY STAR 1-100 score at the campus level are those designated as a multifamily property, hotel, hospital, K-12 school, or senior care community. These property types can also earn an ENERGY STAR score as single-building properties.

3. Metering

- **Is it possible to associate a single meter to multiple properties?**
  A meter that serves multiple properties in a campus situation can be associated to the parent property that represents the entire campus, but a meter cannot be assigned to multiple child properties. In addition, a meter cannot be associated with multiple parent properties. In a situation where a meter serves a subset of properties, the individual buildings (properties) on the campus should sub-meter usage on a building-by-building basis.

- **When I generate metrics for a campus, are the meters from associated child properties automatically included in calculations? If not, how can I include the sub-properties?**
  No. Portfolio Manager will not automatically "roll up" information from child properties to the parent property level. As such, metric calculations for a parent property with child buildings will only use data from meters that are directly associated to the parent property. The reason we do not roll-up all of the meters is that meters on the child buildings may be "sub-meters" of energy represented on a master-meter at the campus level. Therefore, simply rolling everything up might double count some energy use.

  If you would like to associate the same set of meters to both a parent property and its children, you must add the meters to the individual child properties first, and then associate the meters to both the parent and child property. Note that an association must be done at both the parent and child levels, as an association at the parent level only will not trickle down the hierarchy.

  Imagine working your way up the hierarchy as you assign meters to single-building, and then multi-building properties. After correctly associating the meters, metrics at both the parent and child level will take the meters into account.

4. Reporting

- **If I run a spreadsheet report for a campus, will all properties associated with the campus automatically appear in report?**
  No. While the child and parent properties are linked through the campus setup, they are still distinct properties within Portfolio Manager, as reflected by their individual listing on the MyPortfolio tab. You must select the children and parents separately when running a report. Likewise, you need to do the same if you are responding to a data request. For more information about reporting and responding to a data request, see
  www.energystar.gov/buildings/training

- **If I run a chart or graph from the Reporting tab, will the parent as well as the children properties be included in the output?**
  Yes.

5. Sharing

- **When I share a parent property, are the children automatically shared?**
  No. You must share properties individually if you want to grant access to both the parent and child properties on a campus. For more information about sharing, see
  http://www.energystar.gov/buildings/tools-and-resources/how-share-data-other-users-portfolio-manager